Assignment 0:

ALGORITHM sqrt(n)
// Finds $\sqrt{n}$ as an approximation to 5 decimal places
// input: n, non-negative real #
// output: returns, approximation of $\sqrt{n}$, a non-negative real #

```
if n = 0
    return 0

else do loop
    sum ← 0
    iter ← 100
    while iter >= 0.00001
        if (sum)^2 < n
            sum ← sum + iter
        else
            sum ← sum - iter
            iter ← iter/10
    return sum
```